



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,459	07/26/2001	Paul A. Kline	CRNT-0018	7013

7590 01/24/2003

Michael D. Stein
Woodcock Washburn Kurtz
Mackiewicz & Norris LLP
One Liberty Place 46th Floor
Philadelphia, PA 19103

EXAMINER

AMARI, ALESSANDRO V

ART UNIT PAPER NUMBER

2872

DATE MAILED: 01/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,459

Applicant(s)

KLINE, PAUL A.

Examiner

Alessandro V. Amari

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 1-12 are objected to because of the following informalities:

Regarding claims 1-12, the claims should be numbered as 1, 2, etc. and not as currently identified, e.g., [c1] .

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7 and 8 of copending Application No. 09/912,633. Although the conflicting claims are not identical, they are not patentably distinct from each other because the recitation in claim 1 of the instant application is broader and therefore it is obvious that it encompasses all of the limitations in claims 1 and 3 of the co-pending application. Furthermore, regarding claim 2 of the instant application, it would have been obvious to one skilled in the art at the

Art Unit: 2872

time the invention was made to perform the steps within a non-electrically conductive enclosure for safety and isolation purposes. Regarding claim 4 of the instant application, it would have been obvious to one skilled in the art at the time the invention was made to utilize a fiber optic transmission line as an isolator as it is a well-known that an optical fiber is a non-electrically conductive medium. Claim 5 of the instant application, is broader and it is obvious that it encompasses the scope of claim 7 of the copending application. Claim 6 of the instant application, is broader and obvious that it encompasses the scope of claim 8 of the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-5, 7 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanderson U.S. Patent 6,040,759.

In regard to claims 1 and 7, Sanderson discloses (see Figures 8 and 9) a method of safely transporting high-frequency signals over power transmission lines, or an apparatus for safely transporting high-frequency signals over power transmission lines (1302), comprising the steps of: coupling and de-coupling high-frequency electrical signals on a first power transmission line; converting said high-frequency electrical

Art Unit: 2872

signals to light signals and light signals to said high-frequency electrical signals with an electro-optical transducer (1170) for coupling and de-coupling said high-frequency electrical signals to and from a non-electrically conductive but light conductive medium (1174) as described in column 9, lines 7-59.

Regarding claims 3 and 9, Sanderson teaches that said light conductive medium is a fiber-optic isolator as described in column 9, lines 37-39.

Regarding claims 4 and 10, Sanderson teaches that said fiber-optic isolator is a fiber-optic transmission line as described in column 9, lines 37-39.

Regarding claims 5 and 11, Sanderson teaches (see Figure 8) transmitting said light signals to and from an interface device (1160) for digital appliances.

6. Claims 1, 3, 4, 7, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Summerhayes U.S. Patent 4,070,572.

In regard to claims 1 and 7, Sanderson discloses (see Figure 1) a method of safely transporting high-frequency signals over power transmission lines, or an apparatus for safely transporting high-frequency signals over power transmission lines (100), comprising the steps of: coupling and de-coupling high-frequency electrical signals on a first power transmission line (101); converting said high-frequency electrical signals to light signals and light signals to said high-frequency electrical signals with an electro-optical transducer (PD1, 105) for coupling and de-coupling said high-frequency electrical signals to and from a non-electrically conductive but light conductive medium (110).

Regarding claims 3 and 9, Sanderson teaches that said light conductive medium is a fiber-optic isolator as described in column 4, lines 25-27.

Regarding claims 4 and 10, Sanderson teaches that said fiber-optic isolator is a fiber-optic transmission line as described in column 4, lines 25-27.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanderson U.S. Patent 6,040,759 in view of Official Notice.

Regarding claims 2 and 8, Sanderson teaches the invention as set forth above but does not teach performing said steps within a non electrically conductive enclosure or a non-electrically conductive enclosure for at least said coupler means and said transducer. Official Notice is taken that it is notoriously old and well known in the electrical transmission art to enclose components in a non-electrically conductive enclosure for safety and electrical isolation purposes.

Allowable Subject Matter

9. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2872

Claim 12 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "a second electro-optical transducer connected to an opposite end of said fiber-optic isolator for coupling and de-coupling said high-frequency electrical signals and said light signals to and from an opposite end of said fiber-optic isolator; and a second coupling means for coupling and de-coupling said high-frequency electrical signals on a second power transmission line so as to form an electrically isolated power line bridge" as set forth in the claimed combination.

The prior art of record, Sanderson teaches an apparatus or method for safely transporting high-frequency signals over power transmission lines, comprising coupler means for coupling and de-coupling high-frequency electrical signals on a first power transmission line; an electro-optical transducer capable of converting said high-frequency electrical signals to light signals and light signals to said high-frequency electrical signals; and a non-electrically conductive but light conductive medium adjacent said transducer for coupling and de-coupling said light signals. However, the prior art does not teach a second electro-optical transducer connected to an opposite end of said fiber-optic isolator for coupling and de-coupling said high-frequency electrical signals and said light signals to and from an opposite end of said fiber-optic isolator; and a second coupling means for coupling and de-coupling said high-frequency electrical signals on a second power transmission line so as to form an electrically isolated power line bridge and there is no teaching or motivation to modify this difference as derived.


Art Unit: 2872

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (703) 306-0533. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ava *ava*
January 23, 2003


MARK A. ROBINSON
PRIMARY EXAMINER